

B190R11V1

Remote commissioning unit

For the safe filling and refilling of porcelain insulators in outdoor switchgear

Finest hairline cracks may occur on porcelain insulators for circuit breakers or other SF₆ insulated electrical equipment such as measuring or current transformers during transportation or as a result of material stress. Filling the gas compartment with SF₆ may lead to dangerous bursting of the insulator.

Thanks to the "CommGuard Web" filling unit it is now possible, for the very first time, to fill porcelain insulators in a controlled and safe way from a distance of up to 100 m. This unit enables the operator to control and monitor the fully automated filling process using a smartphone, tablet or laptop from outside the danger zone.

The device is equipped with an external temperature sensor and fills the gas compartment to a constant gas density. The temperature-compensated filling pressure is thus achieved with a precision of ± 50 mbar. Furthermore, there is the option of connecting DILO weighing scales to the unit and the gas quantity filled in can be precisely recorded (e.g. K091R67, 3-001-R021 ± 20 g).

Different types of gas compartments can be added and recalled in the data base. Data recording completes the functions of the compact unit and sets new quality standards.



Standard version

- DILO couplings DN8 for storage cylinders and gas compartments
- Gas compartment temperature recording: 0 to 50 °C
- Weight recording via easy connection for WE100 scales (e.g. K091R67, 3-001-R021)
- 2 operating manuals in German or English

Special features

- Filling of gas: 0 - 10 bar
- DILO couplings: DN8
- Operating voltage: 220 - 240 V
- Frequency: 50 - 60 Hz
- Operating voltage: 110 - 120 V
- Frequency: 60 Hz
- Operation: manual

Advantages & functions

- Robust and light portable unit with integrated storage space for accessories
- Simple operation using smartphone, tablet or laptop via WLAN
- Visual and acoustic signalling of system conditions on site
- Temperature compensation of the filling pressure
- Recording of the SF₆ weight
- Data connection via FTP interface
- Pressure range: max. 10 bar absolute
- Max. WLAN range: up to 100 m depending on local conditions

Technical data

Dimensions (W x H x D)	500 x 190 x 295 mm
Weight	8 kg
Operating temperature	0 to 50 °C
Accuracy	pressure +/- 0.05 bar
Operating voltage	110 - 240 V
Frequency	50 - 60 Hz AC

Optional accessories

3-393-R001	SF ₆ gas refilling device for high-voltage
6-1042-R020	2 m long rubber hose DN8 with DIL0 coupling tongue part DN8 on both ends
05-1850-R001	Detached WLAN antenna with magnetic base
05-1602-R304	4 m long cable with M12 plug connectors for serial data exchange
K091R67	Electronic bottle scales (Comfort)
3-001-R021	SF ₆ gas refilling device with digital weighing scales 0 - 120 kg

